Wind Farm in Scott River

Proposal Content Document

Table 1: General proposal content description

Proposal title	Wind Farm in Scott River
Proponent name	Synergy Renewable Energy Developments Pty Ltd (SynergyRED)
Short description	This proposal is for the development of an onshore wind farm in the Scott River region, approximately 15 km north-east of the town of Augusta, in the South West of Western Australia.
	The Proposal will involve the construction and operation of up to 20 wind turbines, generating up to 100 MW, with associated infrastructure including meteorological masts and communication towers, operation and maintenance building, substation and transmission infrastructure and other supporting infrastructure. It is located across numerous freehold properties primarily cleared for agricultural purposes and Blue Gum plantation.
	The wind farm substation will connect the Proposal to the South West Interconnected System (SWIS) via the existing 132 kV Beenup to Manjimup transmission line.

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range		
Physical elements				
Wind turbines including associated foundations and hardstands	Figure 1	107 ha of disturbance, including clearing of no more than 1 ha of remnant native vegetation, within a 3,597 ha Development Envelope.		
Meteorological masts and communication towers				
Substation and transmission infrastructure				
Operations and maintenance area				
Site entrances, internal access roads and public viewing area				
Other supporting infrastructure and utilities (e.g. concrete batching plants, borrow pits, site				

Proposal element	Location / description	Maximum extent, capacity or range			
office, water storage and construction laydown areas)					
Construction elements					
Construction water supply	Within the Development Envelope (Figure 1)	Water tanks and/or storage dams will be installed to support construction and operational water requirements. Water will be sourced elsewhere, purchased and ported in. There is a possibility that any dewater collected during construction, if treated appropriately to a suitable quality, may also be able to be used during construction.			
Concrete batching plants	Within the Development Envelope (Figure 1)	Concrete for the foundations will be mixed at concrete batching plants. Concrete batching material may be sourced offsite.			
Dewatering for construction of underground infrastructure including turbine, meteorological mast and communication tower foundations	Within the Development Envelope (Figure 1)	Groundwater drawdown will not exceed 2 mbgl, measured from the natural land surface at the perimeter of each foundation.			
Operational elements					
Wind energy production	Within the Development Envelope (Figure 1)	A maximum of 20 turbines, with a maximum total energy production of 100 MW.			
Proposal elements with greenhouse gas emissions [^]					
Construction elements:					
Scope 1	3,799 tCO ₂ -e				
Scope 2	149 tCO ₂ -e				
Scope 3	99,958 tCO ₂ -e				
Operation elements:					
Scope 1	156 tCO ₂ -e per year				
Scope 2	134 tCO₂-e per year				
Scope 3	40 tCO ₂ -e per year				

Proposal element Location / description Maximum extent, capacity or range

Rehabilitation

The Proposal utilises existing cleared areas (i.e. agricultural and tree plantation land devoid of native vegetation) wherever possible. Minor areas of native vegetation necessary for construction and operation of the Proposal will be cleared. Following construction, and where practicable, the Proponent will conduct progressive rehabilitation in areas no longer required, to meet the original land use or to an agreed post closure land use with the landowners. The rehabilitation of sites used for temporary infrastructure can inform the broader post-decommissioning rehabilitation strategy by identifying the most effective rehabilitation techniques.

Commissioning

The Proposal's commissioning stage has no additional effects on the environment.

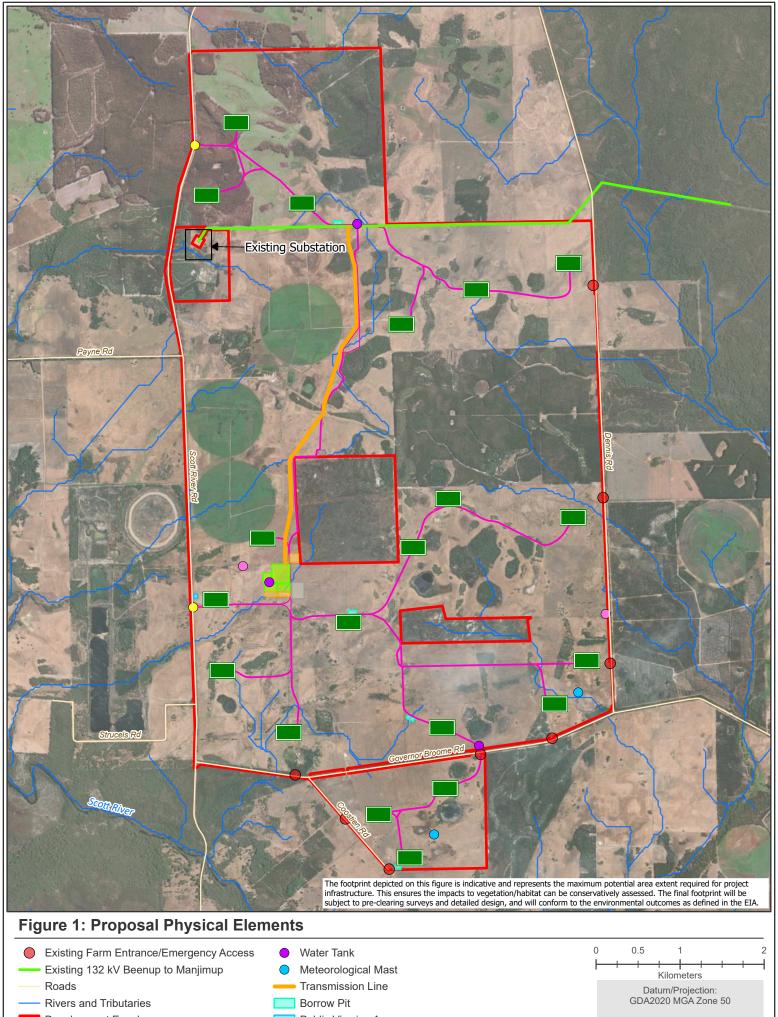
Decommissioning

Once the initial operational life of the Proposal comes to an end, the wind farm can be repowered by replacing the wind turbines, or wind turbine components to extend Proposal life. If repowering the wind farm is not viable, the Proponent will decommission and rehabilitate the Proposal site to an agreed post-closure land use with landowners. This will involve the dismantling and removal of all turbines and above ground infrastructure, unless otherwise agreed with the relevant landowners, noting it's likely that the landowner may want to retain some infrastructure (e.g. access roads). Below ground infrastructure will also be removed if environmentally acceptable and agreed upon with landowners, in accordance with the Decommissioning Plan. The removal and disposal of materials and components will be conducted in a manner that minimises impacts to the environment and the infrastructure itself, to allow for the reuse of components, if viable.

Other elements which affect extent of effects on the environment				
Proposal time	Maximum project life	64 years*		
	Construction phase	18 to 24 months		
	Operations phase	30 to 60 years		
	Decommissioning and rehabilitation phase	24 months		

[^]The greenhouse gas assessment is considered to be conservative due to the application of the mitigation hierarchy, which has changed since the Proposal design (e.g. reduced clearing).

^{*}This accounts for potential repower after 30 years of operation.



- Development Envelope
- **Proposal Physical Elements**
- Wind Turbine
 - **Communication Tower**
- Main Site Entrance

- Public Viewing Area
- Internal Access Road
- Concrete Batching Plants
- Construction Laydown Areas
- O&M Area, Project Substation, Construction Site Offices

